Part 8 - Materials Manual May 2005

Section 985 SAMPLE REDUCTION METHODS

985.01 Scope

This procedure covers the reduction of large samples of bituminous paving mixes, including hot mix asphalt (HMA), stone matrix asphalt (SMA) and cold mix asphalt field samples to the appropriate size for testing. These techniques are intended to minimize variations in measured characteristics between the test samples and the larger sample.

985.02 Procedure

Utilize AASHTO T 248; Reducing Samples of Aggregate to Testing Size with the following modifications:

Method A- Mechanical Splitter

Method A is the preferred method of reduction for dense-mix HMA.

Add to section 7 Apparatus

- Cooking spray
- Oven: capable of heating sample to a temperature sufficient for sample to be pliable
- Heat resistant gloves.
- Any convenient method for heating splitter and splitter pans in a manner that does not damage apparatus
- A non-contact temperature device such as an infrared temperature gun.

Add to the beginning of Section 8 Procedure:

If the sample does not separate easily, warm the sample in the oven (230° F max) until it can be mixed and separated (not to exceed 2 hrs).

Splitter and splitter pans may be heated, not to exceed 230° F, as determined by a non-contact temperature device; splitter may be sprayed with a light coating of cooking spray, if necessary, to keep fines from sticking to the splitter.

Method B -

Method B may be used for reduction of field samples of SMA or Open-Graded Seal Coat (OGSC) and other bituminous mixtures whose point of acceptance is the plant from truck transports.

Add to section 9 Apparatus:

- Oven: capable of heating sample to a temperature sufficient for sample to be pliable
- Heat resistant gloves
- Do not use canvas blanket for SMA or OGSC

Add to section 10:

If the sample does not separate easily, warm the sample in the oven (230° F max) until it can be mixed and separated (not to exceed 2 hrs). Tools may be heated, not to exceed 230° F.